



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,816	06/26/2003	Yasuyuki Higashiura	1081.1177	2742
21171	7590	05/31/2007	EXAMINER	
STAAS & HALSEY LLP			HWANG, JOON H	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			2166	
			MAIL DATE	DELIVERY MODE
			05/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/603,816	HIGASHIURA ET AL.
	Examiner Joon H. Hwang	Art Unit 2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 March 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

1. The applicants requested for reconsideration in the amendment filed on 3/14/07.

The pending claims are 1-16.

Response to Arguments

2. Applicant's arguments filed in the amendment received on 3/14/07 have been fully considered but they are not persuasive.

A. The applicants argue that references do not teach, disclose, or suggest a management device that "registers and revises the content on the portable medium and stores a processing history of said registration processing or revision processing and the media ID for the content in relation to each other into said storage unit."

The examiner respectfully traverses.

It is a well settled rule that a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. See *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979) and *In re Lamberti*, 545 F.2d 747, 192 USPQ 278 (CCPA 1976) as well as *In re Bode*, 550 F.2d 656, 193 USPQ (CCPA 1977) which indicates such fair suggestions to unpreferred embodiments must be considered even if they were not illustrated. Additionally, it is an equally well settled rule that what a reference can be said to fairly suggest relates to the concepts fairly contained therein, and is not limited by the specific structure chosen to illustrate such concepts. See *In re Bascom*, 230 F.2d 612, 109 USPQ 98 (CCPA 1956).

Kuroda teaches the management device, on command from an external device, registers and revises the content on the storage (i.e., a registration of an updated version of an original document, sections 34-39 on pages 37-38, section 73 on pages 48-49, and fig. 21 on page 22) and stores a processing history of the registration processing or a revision processing and the media information for the content in relation to each other into the storage unit (i.e., stores a discernment ID including information of an original sequence, sections 34-39 on pages 37-38, fig. 7 on page 12, sections 11-13 on page 30, section 16 on pages 32-33, and item P4 in fig. 2, and physical whereabouts, section 7 on page 29, sections 26-27 on page 35, and sections 56-61 on pages 41-42).

Kuroda teaches the content can be stored in a storage, such as a magnetic disk drive, an optical disk unit, magneto-optic-disk equipment, a memory card, a floppy disk, CD-ROM, an optical disk and a magneto-optic disk (sections 79-85 on pages 52-53). Kuroda discloses such storage is used as the document storage section storing documents (section 82 on page 52). This teaches documents can be stored in a storage, such as a portable medium, separately from document management information. Therefore, Kuroda teaches the content is removed from the management device via the portable medium.

Higashiura also teaches the portable medium containing the content is removed from the management device. Higashiura discloses:

In these functions, since a file (electronic documents, etc.) is basically stored in a RAID (redundant array of independent disks) device, the entire volume of a stored file is large, and it is necessary to extend a disk or sweep a part of the file to an external medium before the RAID device becomes full. (section 10 on page 1).

To guarantee the originality of a document, not only a file server, but also the above mentioned specific functions are required. In addition, when an original document is electronically stored, it is normally stored in a RAID device as with a common file server. **When the RAID device is full, it is necessary to add a disk device, or sweep an older file into a tape or an MO.** Therefore, the following care different from that of a normal file server is required in controlling the sweeping process. (section 14 on page 1).

The sweep history file as shown in FIG. 4 is stored on a medium such as a disk not storing a swept file. The sweep history file shown in FIG. 4 comprises fields of intra-electronic-library document information, a time stamp, a storage medium, and a medium ID. (section 75 on page 4).

Then, as shown in FIG. 6A, **the documents A through C are swept.** Only the document D is left in the first storage medium, and there is a larger writable area on the first storage medium. When the document E is added as shown in FIG. 6B, the first storage medium also stores the information about the previously swept documents A through C, that is, the information that the documents A through C have been swept. At this time, **another storage medium also stores a sweep history file.** Then, as shown in FIG. 7A, if there is a backup request when the document E is stored, a difference backup copy is made. That is, backup copies are made for the documents D and E, and the information that the documents A through C have already been swept is also copied for backup. (section 81 on page 4).

First, as shown in FIG. 9A, the documents A through F stored on the first storage medium which is a main storage device are totally copied for backup. Thus, a backup medium stores the documents A through F. Then, assume that, as shown in FIG. 9B, the document G is added to the first storage medium. In FIG. 10A, **the documents A, B, and C are swept into another storage medium, and the information that the documents A, B, and C have been swept is stored on the first storage medium.** At this time, **the sweep history file is stored on another medium.** Then, as shown in FIG. 10B, it is assumed that the documents H and I are added. In FIG. 10A, a backup copy is made. The backup process refers to a difference backup process. That is, the documents G, H, and I and the information that the documents A, B, and C have been swept are copied for backup. (section 84 on page 4).

Thus, Higashiura teaches storing the content in a portable medium separately from the content management information. Specifically, in fig. 10A, the content management information of the documents A, B, and C is stored in the first storage medium, and the documents A, B, and C are stored in another storage medium, not the first storage medium. Also, the sweep history file shown in fig. 4 is stored separately from the storage medium storing documents, such as documents A, B, and C. Therefore, Higashiura also teaches the portable medium containing the content is removed from the management device.

Therefore, the applicants' arguments are not persuasive.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-7, 8-12, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (Patent Abstracts of Japan Publication No. 2001-117820, translated from the Industrial Property Digital Library (http://www.ipdl.ncipi.go.jp/homepg_e.ipdl), pages 1-57) in view of Higashiura et al. (U.S. Publication No. 2002/0002561).

With respect to claim 1, Kuroda teaches a content management system for archiving content as electronic data and managing an original (i.e., the electronic original equipment registers content as electronic data and manages an original, section 7 on page 29 and fig. 1 on page 6). Kuroda teaches a management device for managing histories of a content registration processing and a content revision processing (i.e., a secure archiver (SA) manages an original sequence containing information of document versions of an original document, sections 34-39 on pages 37-38, fig. 7 on page 12, sections 11-13 on page 30, section 16 on pages 32-33, and item P4 in fig. 2). Kuroda teaches a storage unit provided in the management device (i.e., management information storage, P10 in section 65 on page 44, section 66 on page 45,

and fig. 14 on page 20). Kuroda teaches a portable medium for containing the content, that is removably attached to the management device (i.e., a secure medium, item 16 in fig. 3, sections 18-19 on pages 33-34, and sections 82-85 on pages 52-53). Kuroda teaches the management device, on command from an external device, registers and revises the content on the storage (i.e., a registration of an updated version of an original document, sections 34-39 on pages 37-38, section 73 on pages 48-49, and fig. 21 on page 22) and stores a processing history of the registration processing or a revision processing and the media information for the content in relation to each other into the storage unit (i.e., stores a discernment ID including information of an original sequence, sections 34-39 on pages 37-38, fig. 7 on page 12, sections 11-13 on page 30, section 16 on pages 32-33, and item P4 in fig. 2, and physical whereabouts, section 7 on page 29, sections 26-27 on page 35, and sections 56-61 on pages 41-42). Kuroda teaches the portable medium containing the content is removed from the management device (i.e., the content can be stored in a storage, such as a magnetic disk drive, an optical disk unit, magneto-optic-disk equipment, a memory card, a floppy disk, CD-ROM, an optical disk and a magneto-optic disk, sections 79-85 on pages 52-53, such storage is used as the document storage section storing documents, section 82 on page 52, thus teaching documents can be stored in a storage, such as a portable medium, separately from document management information). Kuroda does not explicitly disclose a media ID. However, Higashiura teaches archiving a registered original document to a portable storage medium having a media ID (sections 4-11 on page 1, fig. 1, section 68 on page 3, sections 75-76 on page 4, and section 150 on page 7) in

order to clearly manage the document as to which medium the document has been archived to. Higashiura also teaches the portable medium containing the content is removed from the management device (i.e., sweeping documents to a MO, sections 10 and 14 on page 1, sections 75, 81, and 84 on page 4). Therefore, based on Kuroda in view of Higashiura, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Higashiura to the system of Kuroda in order to clearly manage a document as to which medium the document has been archived to.

With respect to claim 2, Kuroda further teaches the management device creates a registration certificate in response to the registration and revision of the content (i.e., a registration certificate/registration bond information, abstract on pages 1-2, section 7 on page 29, sections 10-13 on page 30, and section 16 on pages 32-33), stores a result together with the content on the storage medium (items 11 and 14 in fig. 3 on page 9, section 16 on pages 32-33, and section 17 on page 33), determines a validity of the registration certificate from the external device (i.e., checking if there is a stored document matching with the registration certificate/document record, sections 70-72 on pages 47-48), and allows access to the content of the storage (sections 70-72 on pages 47-48).

With respect to claim 3, Kuroda further teaches the management device creates a registration certificate in response to the registration and revision of the content (i.e., a registration certificate/registration bond information, abstract on pages 1-2, section 7 on page 29, sections 10-13 on page 30, and section 16 on pages 32-33), stores a result as

content management information (items 11 and 14 in fig. 3 on page 9, section 16 on pages 32-33, and section 17 on page 33), determines a validity of the registration certificate from the external device (i.e., checking if there is a stored document matching with the registration certificate/document record, sections 70-72 on pages 47-48), and allows the content processing history to be read (sections 34-39 on pages 37-38, fig. 7 on page 12, sections 11-13 on page 30, section 16 on pages 32-33, and item P4 in fig. 2).

With respect to claim 5, Kuroda teaches the management device creates and archives serial content managing information in response to registration and revision of the content (i.e., an original sequence, sections 34-39 on pages 37-38, fig. 7 on page 12, sections 11-13 on page 30, section 16 on pages 32-33, and item P4 in fig. 2).

With respect to claim 6, Kuroda further teaches a copying medium for storing a content on the portable medium and the copying medium is distributed to a user (i.e., a secure medium, item 16 in fig. 3 on page 9, sections 18-19 on pages 33-34, and sections 82-85 on pages 52-53). Kuroda discloses a transmission of an enciphered content between a client and the secure archiver, wherein the content is enciphered with a session key (section 69 on pages 46-47), which teaches the session key is given to the client. Kuroda does not explicitly disclose storing an encrypted content on the portable medium. However, Higashiura teaches storing an encrypted content on the portable medium (sections 67-68 on page 3, section 78 on page 4, and section 150 on page 7). The limitations of claim 6 are rejected in the analysis of claim 1 above, and the claim is rejected on that basis.

With respect to claim 7, Kuroda teaches the management device and an external device are connected via a network (fig. 3 on page 9 and section 18 on pages 33-34).

The limitations of claims 8 and 15-16 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

With respect to claim 9, Kuroda teaches the management device creates a registration certificate in response to the registration and revision of the content (i.e., a registration certificate/registration bond information, abstract on pages 1-2, section 7 on page 29, sections 10-13 on page 30, and section 16 on pages 32-33), stores a results together with the content on the second storage unit (items 11 and 14 in fig. 3 on page 9, section 16 on pages 32-33, and section 17 on page 33).

With respect to claim 10, Kuroda teaches the management device issues the registration certificate to a external device when executing the registration and the revision of the content based on a request from the external device (i.e., issuing a registration certificate/registration bond information to a registrant, section 8 on pages 29-30 and fig. 1 on page 6).

With respect to claim 11, Kuroda teaches the management device determines a validity of the registration certificate received from the external device (i.e., checking if there is a stored document matching with the registration certificate/document record, sections 70-72 on pages 47-48), and allows access to the content in the second storage unit (sections 70-72 on pages 47-48).

With respect to claim 12, Kuroda teaches the management device determines a validity of the registration certificate received from the external device (i.e., checking if

there is a stored document matching with the registration certificate/document record, sections 70-72 on pages 47-48), and allows that the external device reads the processing history of the content (sections 34-39 on pages 37-38, fig. 7 on page 12, sections 11-13 on page 30, section 16 on pages 32-33, and item P4 in fig. 2).

The limitations of claim 14 are rejected in the analysis of claim 5 above, and the claim is rejected on that basis.

5. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (Patent Abstracts of Japan Publication No. 2001-117820, translated from the Industrial Property Digital Library (http://www.ipdl.ncipi.go.jp/homepg_e.ipdl)) in view of Higashiura et al. (U.S. Publication No. 2002/0002561) and Kim et al. (U.S. Publication No. 2002/0169973), and further in view of Brundrett et al. (U.S. Patent No. 6,249,866).

With respect to claim 4, Kuroda and Higashiura disclose the claimed subject matter as discussed above. Higashiura further teaches encrypting the content with an encryption key in response to a content storage (sections 67-68 on page 3, section 78 on page 4, and section 150 on page 7). Kuroda and Higashiura do not explicitly disclose encrypting the encryption key with the media ID. However, Kim teaches encrypting the encryption key with the media ID and storing the encrypted content and encrypted encryption key on the portable medium of the media ID (fig. 1 and sections 11 and 13 on page 1) in order to prevent any unauthorized access to digital media data. Therefore, based on Kuroda in view of Higashiura, and further in view of Kim, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to utilize the teaching of Kim to the system of Kuroda in order to prevent any unauthorized access to digital media data. Kuroda, Higashiura, and Kim do not explicitly disclose producing an encryption key by random numbers. However, Brundrett teaches producing an encryption key based on a random number (abstract and lines 21-45 in col. 2) in order to provide a strong cryptographic solution for encrypted data recovery. Therefore, based on Kuroda in view of Higashiura and Kim, and further in view of Brundrett, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Brundrett to the system of Kuroda in order to provide a strong cryptographic solution for encrypted data recovery.

The limitations of claim 13 are rejected in the analysis of claim 4 above, and the claim is rejected on that basis.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joon Hwang
Patent Examiner
Technology Center 2100

5/28/07